

Pamela Kaduri, Tamika Gilreath, Gary King, Jessie Mbwambo,
Gad Kilonzo, Alan J. Flisher and Stephen A. Matthews

Social networks' influence on tobacco use among students in Dar Es Salaam, Tanzania

This manuscript was commissioned on June 24, 2005. It received editorial review and was accepted for publication on August 3, 2005.

Introduction

Tobacco use is a major cause of preventable morbidity and mortality in both developing and developed countries (WHO, 1995). Tobacco use has increased dramatically in developing countries over the last 25 years, and it is estimated that by 2030, seven out of ten tobacco-attributable deaths will occur in developing countries (WHO, 2002).

Numerous studies worldwide have focused on the correlates, predictors, and risk factors associated with the initiation of cigarette smoking during childhood and adolescence (Zhu *et al.*, 1992; Flay *et al.*, 1998; Shamshudin *et al.*, 2000; Zhang *et al.*, 2000). These studies completed in developed countries have shown an association between the smoking habits of parents and their children's smoking behaviors. In addition, experimentation with the use of cigarettes at a younger age is a predictor of future regular use of a tobacco products as well as experimentation with a wider range of other substance abuse (Soueif *et al.*, 1990).

Generally, school based studies in developing nations show the prevalence of ever smoking to vary considerably. According to data from the Global Youth Tobacco Survey, 37.6% of South African adolescents reported ever smoking in 2002, and over half of the smokers reporting having parents who smoke (WHO, 2002). The occurrence of adolescent ever smoking in Mali was

Keywords

- social networks
- smoking
- adolescents
- Africa

39.8% in 2001, in Mauritania 31.8%, and in Kenya 14.9% (WHO, 2001).

Peer influences (Kwamanga, Odhiambo, & Amukoye, 2003; Maassen, Kremers, Mudde & Joof, 2004) and family members have also been found to be important determinants of cigarette smoking among children in African countries. A school-based study conducted in Zimbabwe among secondary school children showed that more fathers (25.5%) than mothers (8.7%) were tobacco users (Aaro *et al.*, 2000). Adelekan *et al.* (1993) completed a study in Nigeria among college age students that indicated siblings had a greater influence on smoking behavior than parents.

Despite the importance of developing strategies to prevent tobacco use among adolescents, there is very little country-specific data on adolescent smoking in African countries, such as Tanzania. Recently, Jagoe *et al.* (2002) completed a study of smoking among individuals 15 years and older in Tanzania, and found that 27% of men and 5% of women were ever smokers.

The purpose of the present study was to provide representative data about smoking among adolescents in Dar es Salaam, Tanzania. Dar es Salaam is a large and mostly urban area that presents easy access to tobacco products, advertisements, and health messages. Further, due to the increased number of restrictions placed on tobacco industry marketing and sales practices in developed nations, tobacco companies are targeting developing countries as sources for future consumers and production. The deleterious effects of increased tobacco consumption among these populations will outweigh the economic benefits of being active participants in the tobacco industry. The present circumstances combined with the paucity of data available regarding adolescent tobacco use in Tanzania

provide the impetus for dissemination of the data presented here. The results of this study could be useful in designing and targeting specific interventions and developing proactive youth anti-smoking tobacco control policies in Tanzania and other developing countries in Africa. These data also help to establish important baseline figures for measuring progress in tobacco efforts in Tanzania.

Materials and methods

The data for this study were collected using a self-administered questionnaire completed by 4,037 adolescents enrolled

Corresponding author
Gary King
Associate Professor
Department of Biobehavioral Health
Pennsylvania State University
United States
Email: gaxk14@psu.edu

Pamela Kaduri
Department of Psychiatry, Muhimbili
University College of Health Sciences,
Tanzania

Tamika Gilreath
Department of Biobehavioral Health,
Pennsylvania State University, USA

Jessie Mbwambo
Department of Psychiatry, Muhimbili
University College of Health Sciences,
Tanzania

Gad Kilonzo
Department of Psychiatry, Muhimbili
University College of Health Sciences,
Tanzania

Alan J. Flisher
Division of Child and Adolescent
Psychiatry and Adolescent Health
Research Institute, University of Cape
Town, RSA

Stephen A. Matthews
Department of Sociology, Pennsylvania
State University, USA